

**First determination of Calpionellids standard zones in the Argentina Republic. Comparison with the Cuban zones. Tethys-Pacific connection.**

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It is presented for the first time a biozonation of Calpionellids in the Jurassic-Cretaceous boundary of the Argentina Republic. It is a synthesis of the results obtained in the sampling projects accomplished in La Plata Museum and in outcrops. The studied region is located within the area of the Neuquina Basin. The Calpionellids have been found in interbedded calcareous as part in a black shale sequence known as Vaca Muerta Formation that corresponds to a platform deposits off-shore to basin ones.

The zones recognized are:

1- Middle Tithonian: zone of Chitinoidea.

The samples studied in Vaca Muerta Formation correspond to microfossils of wackestones with Chitinoidea boneti, Chitinoidea sp. and casts of radiolarians. The assemblages were described in the locality of Río Seco del Altar in the Mendoza Province.

2- Upper Tithonian: Zone of Crassicollaria.

The biota found in the fossiliferous mudstone-wackestone is the following: Calpionella alpina ("large forms"), Crassicollaria sp., casts of radiolarians and other groups "*Incertae Sedis*". This zone was described in Arroyo Durazno and Río Seco del Altar localities.

3- Berriasian: Zone of Calpionella.

It's characterized by Calpionella alpina ("small forms"), Nannoconus spp. and radiolarians. It has been described in the locality of Chacay Melehue.

In Cuba we described similar deposits in Artemisa Formation. This event is an evidence of the marine communication between distant paleogeographic regions.